

General Assembly

Amendment

January Session, 2011

LCO No. 8577

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Offered by:

REP. PISCOPO, 76th Dist.

To: Senate Bill No. **1243**

File No.

Cal. No.

"AN ACT CONCERNING THE ESTABLISHMENT OF THE DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION AND PLANNING FOR CONNECTICUT'S ENERGY FUTURE."

- 1 Strike section 102 in its entirety and substitute the following in lieu
- 2 thereof:
- 3 "Sec. 102. Section 16a-48 of the general statutes is repealed and the
- 4 following is substituted in lieu thereof (*Effective July 1, 2011*):
- 5 (a) As used in this section:
- 6 (1) ["Office" means the Office of Policy and Management]
- 7 "Department" means the Department of Energy and Environmental
- 8 Protection;
- 9 (2) "Fluorescent lamp ballast" or "ballast" means a device designed
- 10 to operate fluorescent lamps by providing a starting voltage and
- 11 current and limiting the current during normal operation, but does not
- 12 include such devices that have a dimming capability or are intended
- 13 for use in ambient temperatures of zero degrees Fahrenheit or less or

14 have a power factor of less than sixty-one hundredths for a single

- 15 F40T12 lamp;
- 16 (3) "F40T12 lamp" means a tubular fluorescent lamp that is a
- 17 nominal forty-watt lamp, with a forty-eight-inch tube length and one
- 18 and one-half inches in diameter;
- 19 (4) "F96T12 lamp" means a tubular fluorescent lamp that is a
- 20 nominal seventy-five-watt lamp with a ninety-six-inch tube length and
- 21 one and one-half inches in diameter;
- 22 (5) "Luminaire" means a complete lighting unit consisting of a
- 23 fluorescent lamp, or lamps, together with parts designed to distribute
- 24 the light, to position and protect such lamps, and to connect such
- 25 lamps to the power supply;
- 26 (6) "New product" means a product that is sold, offered for sale, or
- 27 installed for the first time and specifically includes floor models and
- 28 demonstration units;
- 29 (7) ["Secretary" means the Secretary of the Office of Policy and
- 30 Management] "Commissioner" means the Commissioner of Energy
- 31 <u>and Environmental Protection;</u>
- 32 (8) "State Building Code" means the building code adopted
- 33 pursuant to section 29-252;
- 34 (9) "Torchiere lighting fixture" means a portable electric lighting
- 35 fixture with a reflector bowl giving light directed upward so as to give
- 36 indirect illumination;
- 37 (10) "Unit heater" means a self-contained, vented fan-type
- 38 commercial space heater that uses natural gas or propane and that is
- 39 designed to be installed without ducts within the heated space. "Unit
- 40 heater" does not include a product regulated by federal standards
- 41 pursuant to 42 USC 6291, as amended from time to time, a product that
- 42 is a direct vent, forced flue heater with a sealed combustion burner, or
- any oil fired heating system;

(11) "Transformer" means a device consisting of two or more coils of insulated wire that transfers alternating current by electromagnetic induction from one coil to another in order to change the original voltage or current value;

- (12) "Low-voltage dry-type transformer" means a transformer that: 48 49 (A) Has an input voltage of six hundred volts or less; (B) is between 50 fourteen kilovolt-amperes and two thousand five hundred one 51 kilovolt-amperes in size; (C) is air-cooled; and (D) does not use oil as a 52 coolant. "Low-voltage dry-type transformer" does not include such 53 transformers excluded from the low-voltage dry-type distribution 54 transformer definition contained in the California Code of Regulations, 55 Title 20: Division 2, Chapter 4, Article 4: Appliance Efficiency 56 Regulations;
- 57 (13) "Pass-through cabinet" means a refrigerator or freezer with 58 hinged or sliding doors on both the front and rear of the refrigerator or 59 freezer;
- 60 (14) "Reach-in cabinet" means a refrigerator, freezer, or combination 61 thereof, with hinged or sliding doors or lids;
- 62 (15) "Roll-in" or "roll-through cabinet" means a refrigerator or 63 freezer with hinged or sliding doors that allows wheeled racks of 64 product to be rolled into or through the refrigerator or freezer;
- (16) "Commercial refrigerators and freezers" means reach-in cabinets, pass-through cabinets, roll-in cabinets and roll-through cabinets that have less than eighty-five feet of capacity, which are designed for the refrigerated or frozen storage of food and food products;
- 70 (17) "Traffic signal module" means a standard eight-inch or twelve-71 inch round traffic signal indicator consisting of a light source, lens and 72 all parts necessary for operation and communication of movement 73 messages to drivers through red, amber and green colors;

(18) "Illuminated exit sign" means an internally illuminated sign that is designed to be permanently fixed in place and used to identify an exit by means of a light source that illuminates the sign or letters from within where the background of the exit sign is not transparent;

- 78 (19) "Packaged air-conditioning equipment" means air-conditioning 79 equipment that is built as a package and shipped as a whole to end-80 user sites;
- 81 (20) "Large packaged air-conditioning equipment" means air-cooled 82 packaged air-conditioning equipment having not less than two 83 hundred forty thousand BTUs per hour of capacity;
 - (21) "Commercial clothes washer" means a soft mount front-loading or soft mount top-loading clothes washer that is designed for use in (A) applications where the occupants of more than one household will be using it, such as in multifamily housing common areas and coin laundries; or (B) other commercial applications, if the clothes container compartment is no greater than three and one-half cubic feet for horizontal-axis clothes washers or no greater than four cubic feet for vertical-axis clothes washers;
- 92 (22) "Energy efficiency ratio" means a measure of the relative 93 efficiency of a heating or cooling appliance that is equal to the unit's 94 output in BTUs per hour divided by its consumption of energy, 95 measured in watts;
- 96 (23) "Electricity ratio" means the ratio of furnace electricity use to total furnace energy use;
- 98 (24) "Boiler" means a space heater that is a self-contained appliance 99 for supplying steam or hot water primarily intended for space-heating. 100 "Boiler" does not include hot water supply boilers;
- 101 (25) "Central furnace" means a self-contained space heater designed 102 to supply heated air through ducts of more than ten inches in length;
- 103 (26) "Residential furnace or boiler" means a product that utilizes

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104 only single-phase electric current or single-phase electric current or DC 105 current in conjunction with natural gas, propane or home heating oil 106 and that (A) is designed to be the principal heating source for the 107 living space of a residence; (B) is not contained within the same cabinet 108 as a central air conditioner with a rated cooling capacity of not less 109 than sixty-five thousand BTUs per hour; (C) is an electric central 110 furnace, electric boiler, forced-air central furnace, gravity central 111 furnace or low pressure steam or hot water boiler; and (D) has a heat 112 input rate of less than three hundred thousand BTUs per hour for an 113 electric boiler and low pressure steam or hot water boiler and less than 114 two hundred twenty-five thousand BTUs per hour for a forced-air 115 central furnace, gravity central furnace and electric central furnace;

- 116 (27) "Furnace air handler" means the section of the furnace that 117 includes the fan, blower and housing, generally upstream of the 118 burners and heat exchanger. The furnace air handler may include a 119 filter and a cooling coil;
- (28) "High-intensity discharge lamp" means a lamp in which light is produced by the passage of an electric current through a vapor or gas, the light-producing arc is stabilized by bulb wall temperature and the arc tube has a bulb wall loading in excess of three watts per square centimeter;
- (29) "Metal halide lamp" means a high intensity discharge lamp in which the major portion of the light is produced by radiation of metal halides and their products of dissociation, possibly in combination with metallic vapors;
- 129 (30) "Metal halide lamp fixture" means a light fixture designed to be 130 operated with a metal halide lamp and a ballast for a metal halide 131 lamp;
- 132 (31) "Probe start metal halide ballast" means a ballast used to 133 operate metal halide lamps that does not contain an ignitor and that 134 instead starts lamps by using a third starting electrode probe in the arc 135 tube;

(32) "Single voltage external AC to DC power supply" means a device that (A) is designed to convert line voltage AC input into lower voltage DC output; (B) is able to convert to only one DC output voltage at a time; (C) is sold with, or intended to be used with, a separate enduse product that constitutes the primary power load; (D) is contained within a separate physical enclosure from the end-use product; (E) is connected to the end-use product in a removable or hard-wired male and female electrical connection, cable, cord or other wiring; (F) does not have batteries or battery packs, including those that are removable or that physically attach directly to the power supply unit; (G) does not have a battery chemistry or type selector switch and indicator light or a battery chemistry or type selector switch and a state of charge meter; and (H) has a nameplate output power less than or equal to two hundred fifty watts;

- (33) "State regulated incandescent reflector lamp" means a lamp that is not colored or designed for rough or vibration service applications, has an inner reflective coating on the outer bulb to direct the light, has an E26 medium screw base, a rated voltage or voltage range that lies at least partially within one hundred fifteen to one hundred thirty volts, and that falls into one of the following categories: (A) A bulged reflector or elliptical reflector or a blown PAR bulb shape and that has a diameter that equals or exceeds two and one-quarter inches, or (B) a reflector, parabolic aluminized reflector, bulged reflector or similar bulb shape and that has a diameter of two and one-quarter to two and three-quarters inches. "State regulated incandescent reflector lamp" does not include ER30, BR30, BR40 and ER40 lamps of not more than fifty watts, BR30, BR40 and ER40 lamps of sixty-five watts and R20 lamps of not more than forty-five watts;
- 164 (34) "Bottle-type water dispenser" means a water dispenser that uses 165 a bottle or reservoir as the source of potable water;
 - (35) "Commercial hot food holding cabinet" means a heated, fully-enclosed compartment with one or more solid or partial glass doors that is designed to maintain the temperature of hot food that has been

169 cooked in a separate appliance. "Commercial hot food holding cabinet"

- 170 does not include heated glass merchandizing cabinets, drawer
- 171 warmers or cook-and-hold appliances;
- 172 (36) "Pool heater" means an appliance designed for heating
- 173 nonpotable water contained at atmospheric pressure for swimming
- 174 pools, spas, hot tubs and similar applications, including natural gas,
- heat pump, oil and electric resistance pool heaters;
- 176 (37) "Portable electric spa" means a factory-built electric spa or hot
- tub supplied with equipment for heating and circulating water;
- 178 (38) "Residential pool pump" means a pump used to circulate and
- 179 filter pool water to maintain clarity and sanitation;
- 180 (39) "Walk-in refrigerator" means a space refrigerated to
- temperatures at or above thirty-two degrees Fahrenheit that has a total
- 182 chilled storage area of less than three thousand square feet, can be
- 183 walked into and is designed for the refrigerated storage of food and
- 184 food products. "Walk-in refrigerator" does not include refrigerated
- 185 warehouses and products designed and marketed exclusively for
- 186 medical, scientific or research purposes;
- 187 (40) "Walk-in freezer" means a space refrigerated to temperatures
- 188 below thirty-two degrees Fahrenheit that has a total chilled storage
- area of less than three thousand square feet, can be walked into and is
- designed for the frozen storage of food and food products. "Walk-in
- 191 freezer" does not include refrigerated warehouses and products
- designed and marketed exclusively for medical, scientific or research
- 193 purposes;
- 194 (41) "Central air conditioner" means a central air conditioning model
- that consists of one or more factory-made assemblies, which normally
- 196 include an evaporator or cooling coil, compressor and condenser.
- 197 Central air conditioning models may provide the function of air
- 198 cooling, air cleaning, dehumidifying or humidifying.

(b) The provisions of this section apply to the testing, certification and enforcement of efficiency standards for the following types of new products sold, offered for sale or installed in the state: (1) Commercial clothes washers; (2) commercial refrigerators and freezers; (3) illuminated exit signs; (4) large packaged air-conditioning equipment; (5) low voltage dry-type distribution transformers; (6) torchiere lighting fixtures; (7) traffic signal modules; (8) unit heaters; (9) residential furnaces and boilers; (10) residential pool pumps; (11) metal halide lamp fixtures; (12) single voltage external AC to DC power supplies; (13) state regulated incandescent reflector lamps; (14) bottle-type water dispensers; (15) commercial hot food holding cabinets; (16) portable electric spas; (17) walk-in refrigerators and walk-in freezers; (18) pool heaters; and (19) any other products as may be designated by the [office] department in accordance with subdivision (3) of subsection (d) of this section.

- (c) The provisions of this section do not apply to (1) new products manufactured in the state and sold outside the state, (2) new products manufactured outside the state and sold at wholesale inside the state for final retail sale and installation outside the state, (3) products installed in mobile manufactured homes at the time of construction, or (4) products designed expressly for installation and use in recreational vehicles.
- (d) (1) The [office, in consultation with the Department of Public Utility Control,] <u>department</u> shall adopt regulations, in accordance with the provisions of chapter 54, to implement the provisions of this section and to establish minimum energy efficiency standards for the types of new products set forth in subsection (b) of this section. The regulations shall provide for the following minimum energy efficiency standards:
- (A) Commercial clothes washers shall meet the requirements shown in Table P-3 of section 1605.3 of the California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4;

231 (B) Commercial refrigerators and freezers shall meet the August 1, 232 2004, requirements shown in Table A-6 of said California regulation;

- 233 (C) Illuminated exit signs shall meet the version 2.0 product 234 specification of the "Energy Star Program Requirements for Exit Signs" 235 developed by the United States Environmental Protection Agency;
- (D) Large packaged air-conditioning equipment having not more than seven hundred sixty thousand BTUs per hour of capacity shall meet a minimum energy efficiency ratio of 10.0 for units using both electric heat and air conditioning or units solely using electric air conditioning, and 9.8 for units using both natural gas heat and electric air conditioning;
 - (E) Large packaged air-conditioning equipment having not less than seven hundred sixty-one thousand BTUs per hour of capacity shall meet a minimum energy efficiency ratio of 9.7 for units using both electric heat and air conditioning or units solely using electric air conditioning, and 9.5 for units using both natural gas heat and electric air conditioning;
- 248 (F) Low voltage dry-type distribution transformers shall meet or 249 exceed the energy efficiency values shown in Table 4-2 of the National 250 Electrical Manufacturers Association Standard TP-1-2002;
- 251 (G) Torchiere lighting fixtures shall not consume more than one 252 hundred ninety watts and shall not be capable of operating with lamps 253 that total more than one hundred ninety watts;
- 254 (H) Traffic signal modules shall meet the product specification of 255 the "Energy Star Program Requirements for Traffic Signals" developed 256 by the United States Environmental Protection Agency that took effect 257 in February, 2001, except where the department, in consultation with 258 Commissioner of Transportation, determines that such 259 specification would compromise safe signal operation;
- 260 (I) Unit heaters shall not have pilot lights and shall have either

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261 power venting or an automatic flue damper;

(J) On or after January 1, 2009, residential furnaces and boilers purchased by the state shall meet or exceed the following annual fuel utilization efficiency: (i) For gas and propane furnaces, ninety per cent annual fuel utilization efficiency, (ii) for oil furnaces, eighty-three per cent annual fuel utilization efficiency, (iii) for gas and propane hot water boilers, eighty-four per cent annual fuel utilization efficiency, (iv) for oil-fired hot water boilers, eighty-four per cent annual fuel utilization efficiency, (v) for gas and propane steam boilers, eighty-two per cent annual fuel utilization efficiency, (vi) for oil-fired steam boilers, eighty-two per cent annual fuel utilization efficiency, and (vii) for furnaces with furnace air handlers, an electricity ratio of not more than 2.0, except air handlers for oil furnaces with a capacity of less than ninety-four thousand BTUs per hour shall have an electricity ratio of 2.3 or less;

- (K) On or after January 1, 2010, metal halide lamp fixtures designed to be operated with lamps rated greater than or equal to one hundred fifty watts but less than or equal to five hundred watts shall not contain a probe-start metal halide lamp ballast;
- (L) Single-voltage external AC to DC power supplies manufactured on or after January 1, 2008, shall meet the energy efficiency standards of table U-1 of section 1605.3 of the January 2006 California Code of Regulations, Title 20, Division 2, Chapter 4, Article 4: Appliance Efficiency Regulations. This standard applies to single voltage AC to DC power supplies that are sold individually and to those that are sold as a component of or in conjunction with another product. This standard shall not apply to single voltage external AC to DC power supplies sold with products subject to certification by the United States Food and Drug Administration. A single-voltage external AC to DC power supply that is made available by a manufacturer directly to a consumer or to a service or repair facility after and separate from the original sale of the product requiring the power supply as a service part or spare part shall not be required to meet the standards in said

table U-1 until five years after the effective dates indicated in the table;

- 295 (M) On or after January 1, 2009, state regulated incandescent 296 reflector lamps shall be manufactured to meet the minimum average 297 lamp efficacy requirements for federally-regulated incandescent 298 reflector lamps contained in 42 USC 6295(i)(1)(A). Each lamp shall 299 indicate the date of manufacture;
- (N) On or after January 1, 2009, bottle-type water dispensers, commercial hot food holding cabinets, portable electric spas, walk-in refrigerators and walk-in freezers shall meet the efficiency requirements of section 1605.3 of the January 2006 California Code of Regulations, Title 20, Division 2, Chapter 4, Article 4: Appliance Efficiency Regulations. On or after January 1, 2010, residential pool pumps shall meet said efficiency requirements;
- (O) On or after January 1, 2009, pool heaters shall meet the efficiency requirements of sections 1605.1 and 1605.3 of the January 2006 California Code of Regulations, Title 20, Division 2, Chapter 4, Article 4: Appliance Efficiency Regulations.
- 311 (2) Such efficiency standards, where in conflict with the State 312 Building Code, shall take precedence over the standards contained in 313 the Building Code. Not later than July 1, 2007, and biennially 314 thereafter, the Joffice, in consultation with the Department of Public 315 Utility Control, department shall review and increase the level of such 316 efficiency standards by adopting regulations in accordance with the 317 provisions of chapter 54 upon a determination that increased efficiency 318 standards would serve to promote energy conservation in the state and 319 would be cost-effective for consumers who purchase and use such new 320 products, provided no such increased efficiency standards shall 321 become effective within one year following the adoption of any 322 amended regulations providing for such increased efficiency 323 standards.
- 324 (3) The [office, in consultation with the Department of Public Utility 325 Control,] <u>department</u> shall adopt regulations, in accordance with the

provisions of chapter 54, to designate additional products to be subject to the provisions of this section and to establish efficiency standards for such products upon a determination that such efficiency standards (A) would serve to promote energy conservation in the state, (B) would be cost-effective for consumers who purchase and use such new products, and (C) that multiple products are available which meet such standards, provided no such efficiency standards shall become effective within one year following their adoption pursuant to this subdivision.

- (e) On or after July 1, 2006, except for commercial clothes washers, for which the date shall be July 1, 2007, commercial refrigerators and freezers, for which the date shall be July 1, 2008, and large packaged air-conditioning equipment, for which the date shall be July 1, 2009, no new product of a type set forth in subsection (b) of this section or designated by the [office] department may be sold, offered for sale, or installed in the state unless the energy efficiency of the new product meets or exceeds the efficiency standards set forth in such regulations adopted pursuant to subsection (d) of this section.
- (f) The [office, in consultation with the Department of Public Utility Control,] <u>department</u> shall adopt procedures for testing the energy efficiency of the new products set forth in subsection (b) of this section or designated by the department if such procedures are not provided for in the State Building Code. The [office] <u>department</u> shall use United States Department of Energy approved test methods, or in the absence of such test methods, other appropriate nationally recognized test methods. The manufacturers of such products shall cause samples of such products to be tested in accordance with the test procedures adopted pursuant to this subsection or those specified in the State Building Code.
- (g) Manufacturers of new products set forth in subsection (b) of this section or designated by the [office] <u>department</u> shall certify to the [secretary] <u>commissioner</u> that such products are in compliance with the provisions of this section, except that certification is not required

359 for single voltage external AC to DC power supplies and walk-in 360 refrigerators and walk-in freezers. All single voltage external AC to DC 361 power supplies shall be labeled as described in the January 2006 362 California Code of Regulations, Title 20, Section 1607 (9). The [office, in 363 consultation with the Department of Public Utility Control, 364 <u>department</u> shall promulgate regulations governing the certification of 365 such products. The [secretary] commissioner shall publish an annual 366 list of such products.

(h) The Attorney General may institute proceedings to enforce the provisions of this section. Any person who violates any provision of this section shall be subject to a civil penalty of not more than two hundred fifty dollars. Each violation of this section shall constitute a separate offense, and each day that such violation continues shall constitute a separate offense."

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